

Claims

[c1]

1. An input system comprising:

a pen input apparatus having a plurality of penpoints, and a selector for selecting a specific penpoint from said plurality of penpoints; and an input apparatus having a type recognition unit for recognizing the type of said penpoint selected by said selector, and a transmitter for transmitting the track of said penpoint as position information and transmitting the information on said type recognized by said recognition unit to a computer system.

[c2]

2. The input system according to Claim 1,

wherein said pen input system further comprises a frequency generator for generating a different frequency for each said penpoint selected by said selector, and electromagnetic wave outputting unit for outputting an electromagnetic wave having the frequency generated by said frequency generator, and

said type recognition unit recognizes the type of said selected penpoint based on the frequency of the electromagnetic wave output by said electromagnetic wave outputting unit.

[c3]

3. The input system according to Claim 2,

wherein said selector includes a penpoint pushing-out mechanism for pushing out a specific penpoint from the plurality of penpoints in the direction of the pen tip to select it,

said pen input apparatus further has a penpoint ground detector for detecting whether or not the penpoint pushed out by said penpoint pushing-out mechanism has been grounded, and

said electromagnetic wave outputting unit outputs an electromagnetic wave of a different frequency for each penpoint grounded by said penpoint ground detector.

[c4]

4. The input system according to Claim 1, further comprising a computer system including an application for generating image information according to said position information and the information on said type, and a display screen for displaying said image information.

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- [c5] 5. An electronic input apparatus for transmitting input information drawn with a pen to a computer system, comprising:
a coordinate information recognition unit for recognizing a track drawn with a pen as coordinate information;
a type recognition unit for recognizing the type of said pen; and
a transmitter for transmitting said coordinate information recognized by said coordinate information recognition unit to said computer system, and adding the information on said type recognized by said type recognition unit to said coordinate information and transmitting them to said computer system.
- [c6] 6. The electronic input system according to Claim 5, wherein said type recognition unit recognizes the type of said pen by the frequency of the electromagnetic wave generated from said pen.
- [c7] 7. An electronic input apparatus comprising:
a digitizer for grasping a track drawn by a penpoint selected in a writing instrument having a plurality of penpoints and allowing a predetermined penpoint to be selected from said plurality of penpoints, and recognizing the attribute of said penpoint; and
an interface for outputting the position information obtained from the track of said penpoint grasped by said digitizer, and attribute information on said recognized attribute.
- [c8] 8. The electronic input apparatus according to Claim 7, wherein said digitizer allows a recording medium to be placed thereon, and grasps the track drawn on said recording medium by said penpoint of said writing instrument as electronic information.
- [c9] 9. The electronic input apparatus according to Claim 7, wherein said writing instrument includes an oscillation circuit for generating a predetermined frequency, and a coil for outputting an electromagnetic wave by the output from said oscillation circuit,
said oscillation circuit generating a different frequency for each penpoint selected.

- [c10] 10.A writing instrument for inputting to a digitizer, comprising:
a plurality of penpoints for drawing images on a recording medium placed on said digitizer;
a penpoint selector for selecting a specific penpoint from said plurality of penpoints; and
an electromagnetic wave outputting unit for generating, to said digitizer, an electromagnetic wave of a different frequency for each penpoint selected by said penpoint selector.
- [c11] 11.The writing instrument for inputting to a digitizer according to Claim 10, further comprising a pressure detector for detecting whether or not the penpoint selected by said penpoint selector was pressed against said recording medium,
wherein said electromagnetic wave outputting unit generates an electromagnetic wave according to the detection result by said pressure detector.
- [c12] 12.A digitizer comprising:
a track recognition unit for recognizing the track of a pen manipulated by the user;
a pen information recognition unit for recognizing the information on the type of said pen according to the information obtained from said pen; and
an output unit for generating position information from the track recognized by said track recognition unit, and adding the information on the type of said pen recognized by said pen information recognition unit to the generated position information and outputting them.
- [c13] 13.A method for inputting coordinates comprising the steps of:
receiving position information based on the track drawn by the user on recording medium placed on a coordinate input apparatus, and receiving attribute information on the type of a line used for the track drawn from the coordinate input apparatus; and
reflecting said received attribute information on said received position information to electronically record image information corresponding to the

track drawn by the user on said recording medium.

[c14] 14.The method for inputting coordinates according to Claim 13, further comprising the steps of:
receiving attribute information on at least either one of the color and thickness of the line, and
displaying said electronically recorded image information on a display unit by using a line having a display color corresponding to the color of the line drawn on said recording medium or a thickness corresponding to the thickness of the line drawn.

[c15] 15.A method for transmitting coordinate information from a coordinate input apparatus to a computer system, comprising the steps of:
expressing the position information, based on a track drawn by the user with said coordinate input apparatus, in X- and Y-coordinates;
adding attribute information on the type of the line giving said track to said position information expressed by said X- and Y-coordinates, thereby to form a block; and
transmitting the formed block in a predetermined unit.

[c16] 16.A storage medium having stored therein a program to be run on a computer so that said computer can read said program,
wherein said program causes said computer to execute, said program comprises:
a process for receiving position information based on a track drawn by the user on the paper placed on a coordinate input apparatus, and receiving attribute information based on the type of the line used for the line drawn on said paper from said coordinate input apparatus;
a process for recognizing the type of the line from said received attribute information; and
a process for reflecting the recognized line type on said received position information to electronically record image information corresponding to the track drawn by the user on said paper.

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